

**OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD**

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**SUMMARY**
PUBLIC MEETING/PUBLIC HEARING/BUSINESS MEETING

November 20, 2008
Glendale, California

I. PUBLIC MEETING**A. CALL TO ORDER AND INTRODUCTIONS**

Acting Chair Jackson called the Public Meeting of the Occupational Safety and Health Standards Board (Board) to order at 10:00 a.m., November 20, 2008, in the Second Floor Council Chambers of the Glendale City Hall, 613 E. Broadway, Glendale, California.

ATTENDANCE**Board Members Present**

Acting Chairman Bill Jackson
Jonathan Frisch, Ph.D.
Jack Kastorff
Willie Washington

Board Members Absent

Chairman John MacLeod
Josè Moreno
Steve Rank

Board Staff

Marley Hart, Executive Officer
David Beales, Legal Counsel
Mike Manieri, Principal Safety Engineer
Tom Mitchell, Senior Safety Engineer
Bernie Osburn, Staff Services Analyst

Division of Occupational Safety and Health

Steve Smith, Principal Safety Engineer
Larry McCune, Principal Safety Engineer

Others present

Guy Prescott, Operating Engineers Local 3
Rasto Brezny, Manufacturers of
Emission Controls Association
Kate Symmonds, CPIL, UCSD
Kevin Thompson, Cal-OSHA Reporter
Camille Kustin, Environmental Defense Fund
Kim Heroy-Regalski, CARB
Todd Jacobs, Engine Control Systems

Gale L. Plummer, Cleaire
Randall Pasek, SCHQMD

Tina Kulinovich, Federal OSHA

Kevin Bland
Bruce Wick, CalPASC
Robert Wolf, Coastline/John Deere
Beth White, CARB
Wendy Holt, AMPTP
Elizabeth Treanor, Phylmar
Regulatory Roundtable
Charlie Cox, Ironman
John Hakel, AGC of California

Henry Hogo, South Coast Air Quality
Management District
Jogen Bhalla, AMOT
Russ Haddadin, AMOT

Gary Rohman, ECCO Equipment Corp.
Dan Leacox, Greenberg Traurig

B. OPENING COMMENTS

Acting Chair Jackson indicated that this portion of the Board's meeting is open to any person who is interested in addressing the Board on any matter concerning occupational safety and health or to propose new or revised standards or the repeal of standards as permitted by Labor Code Section 142.2.

Guy Prescott, Director of Safety for Operating Engineers Local Union No. 3 and co-author of Petition File No. 507, stated that the petition had been co-authored by Ms. Bo Bradley of the AGC of California. He stated that the petition was a historical event, as labor and management had never before submitted a joint petition to the Board. He expressed the hope that this cooperative effort demonstrates to the Board that the danger presented to the workers of California by an ongoing situation in the construction industry is so prevalent that both labor and management have joined to present this petition. The petition concerns after-market fitting of filtration systems on heavy duty equipment in the field. He stated that the rear visibility of a Caterpillar 988F loader, which spends about 50% of its time in reverse, is reduced to less than half of its normal visibility with the filtration system mounted to the loader. Current Cal-OSHA requirements state that nothing can be placed on large equipment that will block the operator's visibility to the front or side, but they do not address the rear view. From the ground level, the cab of the vehicle is completely obscured by the filtration unit. He stated that similar reductions in visibility result when the filtration unit is placed on other equipment, such as bulldozers and scrapers. He reemphasized that this restriction of visibility is a violation of Cal-OSHA regulations.

In addition, Mr. Prescott stated that the heat generated by the filtration unit exceeds 1200° Fahrenheit, and the placement of the filtration unit sometimes results in the elimination of a handrail, which could result in severe burn injuries to operators or maintenance personnel.

He stated that when discussing this issue with the California Air Resources Board (CARB) staff several weeks ago, he had been informed that there were more than 200 of these installations in the field. He further stated that the comment letter submitted to the Board by CARB indicated that there are now over 430 installations. He indicated that it is a matter of imminent danger to the working men and women on the ground near this equipment, and it is merely a matter of time until someone is killed by this equipment due to the lack of visibility presented by these filters.

Mr. Prescott stated that the language suggested in the petition has been approved by both employee and employer representatives. Every individual in the regulated community is in support of the petition. He also stated that there will be some opposition to the petition, but it will not be from the members of the construction industry or the people whose lives are affected by these filters. He stated that there are, on average, approximately six people on the ground for each operator of the equipment, and blind spots cannot be tolerated.

Dr. Frisch asked Mr. Prescott whether the difference in the proposed language in Sections 1593 and 1597 was deliberate. He stated that Section 1593 would allow the equipment to be approved by either the manufacturer or a professional engineer, but Section 1597 would allow only manufacturer approval. Mr. Prescott responded that it was deliberate, as most jobsite vehicles are automotive vehicles that are no longer used on the road. There is no way that the manufacturer can approve the addition of equipment to older equipment, whereas a structural engineer could approve it. He stated that it is not only an issue of the filters being added, but also the structural safety of the equipment, visibility, etc.

Dr. Frisch asked whether the same situation would be encountered in Section 1597, in which the manufacturer is no longer available to provide approval. Mr. Prescott responded that he is unaware of any manufacturers that are currently out of business, but it could be a different situation in a year or two in light of the economy. Mr. Prescott stated that manufacturer approval is not necessary for installing the filter, provided that it does not block visibility or change the structure of the equipment. If the manufacturers of the filters were to move away from a “one-can-fits-all” design and design a filter that were flat and approximately 4 inches high that would cover the hood area, thus resulting in minimal or no loss of visibility, that would not be a problem.

Dr. Frisch asked whether there are modifications or retrofits that would not reduce visibility. Mr. Prescott responded that, according to some of the installers, there are such installations, but he has not seen one.

Kevin Bland, representing the California Framing Contractors Association (CFCA) and the Residential Contractors Association (RCA), stated that both organizations are in full support of the AGC and Operating Engineers Local Union No. 3 in their petition. He urged the Board to adopt the Board staff’s proposed decision.

Kim Heroy-Regalski with CARB manages the group that is implementing the regulation addressed in Petition File No. 507. She stated that CARB’s mission and the mission of the Board coordinate to promote and protect public health. CARB accomplishes this mission through the effective and efficient reduction of air pollution, which complements the Board’s mission of providing a safe and healthful workplace for California’s workers. Both agencies are working to protect California, and Ms. Heroy-Regalski is confident that the Board and CARB can work together to protect the public from air pollution and prevent serious injuries or fatalities on the jobsite.

Ms. Heroy-Regalski stated that the CARB regulation in question was adopted by CARB in July 2007, and parts of it took effect last summer. It applies to off-road, diesel vehicles, including loaders, backhoes, scrapers, forklifts, etc. It is the latest in a series of regulations that CARB has developed to protect the public from the harmful effects of diesel particulate matter. She stated that California still has the worst air quality in the nation, and many areas of the state fail to attain the national health-based air quality standards, resulting in too many days when the ozone level is too high and too many days when the fine particulate matter level is too high. CARB is also trying to reduce health risk from diesel particulate matter with this regulation. CARB believes that diesel particulate matter emissions pose a significant health risk. Diesel particulate matter causes cancer, heart and lung disease, and approximately 70% of the cancer risk from all

the cancer-causing chemicals in the air comes from diesel particulate matter. That is why CARB, on a policy level, has imposed regulations that are very unpopular with the affected industries and that do impose costs and changes on affected industries. CARB sees the need to address and reduce these emissions as an urgent public health need.

Employees working near diesel equipment are perhaps the most exposed to the danger of fine particulate matter. In fact, CARB has been concerned with employee exposure to diesel particulate matter for many years. In 1988, the National Institute of Occupational Safety and Health (NIOSH) identified diesel exhaust as a potential occupational carcinogen. Thus, people on both sides of the table have been working on this issue for several years. In fact, the epidemiological studies that led CARB to identify diesel particulate matter as an air toxin were worker studies based on railroad workers. The health benefits resulting from this regulation will benefit workers as well as the rest of the people in California. This regulation was adopted as an attempt to attain the levels required by national ozone and particulate matter standards. If those standards are not attained, the federal government can impose sanctions and withhold federal highway funds. The driving concern for CARB, however, is the thousands of premature deaths occurring each year that are linked to diesel particulate matter.

The regulation pushes fleets to modernize and move to newer engines and newer vehicles. It also asks fleets either to meet specified fleet average emission targets for particulate matter, or if they are unable or unwilling to do so, they must install retrofits on 20% of their fleet per year, thus gradually phasing in use of the retrofits. Currently parts of the regulation are in effect, such as idling limits. Next year a reporting requirement will take effect, and in 2010, the largest fleets will be required to demonstrate that these retrofits have been installed. The retrofits that have occurred to date are those that have taken early action, as no one is yet required to perform retrofits. CARB is glad to see people experimenting and learning, as they recognize that these retrofits are new and there are going to be lessons learned as the regulations take effect. CARB believes the benefits of the off-road regulation, if successfully implemented, are 4,000 fewer premature deaths and a health-care cost saving of between \$18 and \$26 billion.

Most of the exhaust retrofits are filters that attach to the exhaust pipe and capture the diesel particulate matter before it can be emitted. These filters reduce diesel particulate matter by over 85%. There are many retrofits already in place—CARB believes that there are over 200,000 on heavy-duty vehicles worldwide, including 35,000 filters on construction equipment in Switzerland and Germany. They are beginning to be used in the United States; there are approximately 150 in place in New York, which has requirements similar to California's. CARB believes there are approximately 400 in place in California. They can be used safely. CARB does not argue that there are methods of installing filters that are not safe; placement that blocks the operator's vision is not safe, but in most cases there are ways to install them safely. CARB recognizes that some of the filters get hot during operation, but there are locations to install them where they cannot be touched and there are heat shields available to protect workers. Ms. Heroy-Regalski summarized by stating that there are good installations and bad installations; CARB simply asks that the good not be thrown out with the bad.

The CARB regulation was developed over the course of three years, and CARB was aware that there would be safety issues. Therefore, thorough safety procedures were built into the regulation. If the retrofit manufacturer or installer determines that installation cannot feasibly be

done or cannot be done safely, the vehicle is exempt. If the fleet owner can show that installing the retrofit would violate a safety standard, it is exempt. If an employer indicates that it is unsafe and CARB thinks it is safe, there is a thorough appeals process, and CARB has requested that Cal-OSHA staff work with them on that appeals process. It would be useful to have more objective visibility standards within Title 8 so it will be clear when a retrofit is safe in regard to visibility requirements and when a retrofit impairs visibility, and CARB would be happy to work with Board staff on that. However, CARB does not want its entire program destroyed.

CARB finds Petition File No. 507 problematic because it limits modification to those performed only with prior approval of the vehicle manufacturer. While at first blush that might seem reasonable, if it is considered more deeply, it is not. Vehicle manufacturers would have no incentive to approve such modifications. Even if there were no safety issues, why would a vehicle manufacturer take the time and resources to review the retrofits? In addition, there is serious conflict of interest because Caterpillar is one of the six companies that manufacture retrofits, and CARB believes that Caterpillar would not have any incentive to approve retrofits from their competitors. If the language is adopted as proposed in the petition, it will render large portions of the CARB rule no longer viable and the health benefits would be lost. Ms. Heroy-Regalski concluded by asking that the Board not adopt the language as proposed in the petition; instead, she asked that Board staff work with CARB to craft language that would be acceptable to both entities. She expressed her belief that the CARB regulation can be implemented successfully without endangering workers and serve the missions of both CARB and the Board.

Mr. Kastorff asked whether CARB's regulation addresses only off-road vehicles. Ms. Heroy-Regalski responded that CARB has many rules; the rule addressed in the petition is limited to off-road mobile vehicles of 25 horsepower or greater.

Mr. Kastorff then asked for an estimation of the ratio of diesel off-road vehicles to over-the-highway vehicles. Ms. Heroy-Regalski stated that she was unsure of the exact number, but she indicated that approximately one-third of total emissions are from off-road vehicles.

Camille Kustin from the Environmental Defense Fund (EDF) stated that off-road equipment represents the second-largest source of toxic diesel emissions in the state, with on-road trucks and vehicles representing the largest source, although she did not have specific numbers.

Ms. Heroy-Regalski stated that in 2005, there were approximately 1,100 deaths per year occurring from the sources covered by the regulation, and she could provide the Board with CARB's staff report and technical support document that list exact tons per day in each year.

As an epidemiologist who performed work on the diesel research for CARB several years ago, Dr. Frisch expressed appreciation for what CARB is trying to accomplish with the regulation. He stated that Ms. Heroy-Regalski asserted that prior approval of a vehicle manufacturer would be required in order for the retrofits to occur, but the language does not say that. The language states that if an employer is making a modification that would create a fire hazard or expose employees to burns, high temperatures, or impact the capacity, safety, structural integrity, operator's visibility, or handling of the vehicle, it shall not be done without the manufacturer's approval. He expressed his opinion that that is very different, and if a device can be designed or installed that meets the requirements described and does not impact visibility, is not going to

have thermal impact on the employee, and is a proper installation, the requirement for prior approval would not exist. Ms. Heroy-Regalski responded that it would be easy for someone to argue that, even if a filter obstructs an infinitesimal portion of the operator's vision or if a retrofit is visible at all from the operator's point of view, the retrofit impacts the operator's visibility. It could also be argued that if a retrofit weighs 300 pounds it would reduce the capacity of the vehicle. It could be argued that any retrofit would fall within the criteria of the proposed language and thus be subject to prior written approval from the manufacturer.

Dr. Frisch asked whether, if the petitioners were able to craft language that eliminated the petty argument that any impairment of the operator's visibility is prohibited, CARB would continue to have a problem with the petition. Ms. Heroy-Regalski responded that they might, as it is troubling how difficult it is to determine objectively what is impairing visibility and what is not. Without a definition of what constitutes impairment of visibility, the provision could be greatly abused. She expressed her fear that even well-meaning requirements could be abused easily because of an employer's objection to the cost of performing the retrofits.

Dr. Frisch stated that while he understands Ms. Heroy-Regalski's concern, the concern of the Occupational Safety and Health Standards Board is worker safety. While he is very respectful of CARB's desire to improve public health in the state of California, he is troubled that he does not believe that, based on what he has seen thus far, CARB has sufficiently weighted the safety implications of their regulation. In fact, it is not within their charter to examine the safety implications of this sort of modification, nor is it within the expertise of CARB to be looking at that with respect to employees. It is, as Ms. Heroy-Regalski pointed out, something that the Board staff and the Division staff are highly qualified to do.

Dr. Frisch stated that he does not see the conflict with the proposed petition decision, and he is troubled that it would imply that CARB is prepared to sacrifice safety in order to improve air quality. He does not think that is CARB's intention, but that is the way that he understands it. He stated that he would like to better understand how CARB is factoring in burns to employees and visibility problems that could cause an employee to get run over. He stated that on one hand, CARB has a safeguard that if the retrofits cannot be performed safely then the vehicle is exempt, but CARB seems to be directing the Board not to modify regulations so that the exemption can be used. Ms. Heroy-Regalski apologized if her message was not clear, but the part of the petition that alarms CARB is the prior written approval from the vehicle manufacturer because it will not be forthcoming even if the installation is completely safe.

Dr. Frisch asked whether CARB would be amenable to something if a professional engineer could provide such prior written approval, which is what he asked Mr. Prescott earlier. Ms. Heroy-Regalski responded that, speaking for herself, she would be agreeable to such a provision. Dr. Frisch asked if CARB would agree to such a provision. Ms. Heroy-Regalski responded that CARB would agree, but what they would like is the opportunity to work with Board staff to resolve the issues.

Dr. Frisch stated that if there are already 400 installations in place, there are 400 filters that are potentially impacting safety in the state of California already. Ms. Heroy-Regalski responded that there are also emissions that are already harming people today.

Dr. Frisch stated that that has been going on for a long time. He is concerned that something new is being introduced that is going to impose additional safety impact on the employees in the state of California, and he is not prepared to trade one for the other without due consideration, and that troubles him. He stated that he recognizes what CARB is attempting to accomplish, and he thinks it is a great thing. However, he is not prepared, in his role as a member of the Occupational Safety and Health Standards Board, to say that it is okay to create a new hazard in the workplace in order to accomplish that goal. He expressed his belief that there has to be a way to accomplish both. He stated that he is troubled that these installations are ongoing, and he is very troubled by the statement made previously that installations that may be already creating safety hazards are happening and that there may be violations of OSHA regulations already underway as a result. He does not know the factual basis of that, and he would be interested in hearing the Division's position on that. However, the idea of creating advisory committees for something that labor and management are already in agreement with appears to be a delaying tactic that is not going to solve the problem. It would be wise to craft language that is not going to create a sudden problem where CARB's regulation becomes moot, but it should not be that difficult to accomplish, and he cautioned against creating a new process that would take years to resolve.

Mr. Washington expressed concern regarding the installations that have already taken place and the position in which it places the Division should an accident occur and an investigation be performed somewhat similar to Dr. Frisch's concerns that it may create additional opportunities for injuries and citations for the employers. He stated that it would be interesting to see what experience the Division has had in inspecting these installations and what the experience in the industry as a result of those employers that have implemented the installations. He expressed further concern about knowingly putting DOSH in a position of citing employers for something that the Air(?) Board inadvertently foisted on them. He expressed further concern regarding performing the installations without further exploring alternative methods of reducing air emissions. Ms. Heroy-Regalski responded that CARB's regulation was developed over three years, and she expressed CARB's belief that it represents a good solution. CARB is very eager to work with Board staff to craft language to ensure that fleets do not get cited for attempting to comply with CARB's regulations, which would be counterproductive for employers.

Mr. Kastorff referred to Ms. Heroy-Regalski's assertion that the state of California could lose federal highway funds and expressed his view that California would protect its federal highway funds by regulating off-highway vehicles. Ms. Heroy-Regalski responded that the federal Clean Air Act sets ambient air quality standards, and they require states to submit plans for meeting those standards by a stated deadline. If a state cannot submit an adequate plan indicating compliance by that deadline, federal authorities can impose sanctions or withhold highway funds, and they have done it before. It is their way of forcing states to comply with those standards. This regulation is one of the big regulations that is part of California's overall plan for how it will attain the fine particulate matter standards. If this rule does not achieve the emission reductions that it is supposed to because it runs afoul of Cal-OSHA regulations, it could impair that ability to demonstrate that California will comply by the deadline.

Mr. Kastorff then referenced Ms. Heroy-Regalski's claim that 2/3 of the emissions come from highway vehicles. Ms. Heroy-Regalski responded that CARB is in no way trying to pick on the construction industry. She stated that the CARB rule addressed in the petition is the eighth such

rule that CARB has enacted, and those rules apply to almost all of the diesel engines in the state including cargo-handling trucks and buses. There is a rule going before CARB next week addressing privately-owned heavy duty trucks.

Mr. Kastorff asked whether CARB has imposed requirements on over-the-highway diesel vehicles, and what the result has been. Ms. Heroy-Regalski responded that there have been new engine standards for both on-road and off-road trucks that have taken effect over the past 15 or 20 years that have made new engines cleaner. CARB also is doing a series of in-use rules targeting fleets to push them to turn over to the cleaner vehicles or install the retrofits. The problem with construction equipment is that some of it operates for so many years before needing to be replaced. Even though the new vehicles are cleaner in terms of emissions, the old ones stay around such a long time that they pose a health risk.

Mr. Washington stated that in its letter submitted to the Board, CARB indicated that when they were developing the regulation there were a number of discussions, and he asked whether off-road vehicles were an integral part of those discussions, as opposed to on-road vehicles. Ms. Heroy-Regalski responded that in 1998, CARB identified diesel as a toxic air contaminant. There are provisions in the Health and Safety Code that state if something is a toxic air contaminant, the risk must be assessed by following certain steps. In 2000, CARB adopted a plan to promulgate a series of rules addressing all diesel engines. The three years spent crafting the rule at issue began in late 2004, when CARB began work shopping to establish how many and what type of diesel vehicles were in use, determine the emissions level from those vehicles, and establish possible approaches to controlling the emissions. CARB convened dozens of workshops with affected parties to establish the most manageable method to control diesel emissions. The resulting rule is not a consensus among all affected parties, but appeared to be the best way to handle the problem. She indicated that, if the Board members wished, CARB could provide their 500-page technical support document, which describes all of the work performed on the rule.

Mr. Beales stated that the discussion that had taken place so far during the Public Meeting appears to misconceive some of the procedural matters ordinarily followed by the Board in petition matters. Petitioners very often suggest regulatory language in connection with their petitions, and that regulatory language is not adopted when the petition is granted. Thus, to the extent that CARB is concerned that specific language will be adopted today, that will not happen if the Board follows its normal procedures. Rather, staff will be directed to go forth with a rulemaking proposal. In addition, although no one has requested it thus far, it is possible that an advisory committee of stakeholders and interested parties will be convened. The proposed decision does direct staff to consider input from interested parties, which is always done, but does not require an advisory committee meeting.

Acting Chair Jackson asked Ms. Heroy-Regalski whether the 430 off-road vehicles that had been retrofitted to date were generally construction employers or CalTrans; he further asked whether CalTrans retrofit any of their equipment. Ms. Heroy-Regalski responded that CARB had distributed \$25 million in incentive funds to public agencies.

Acting Chair Jackson asked whether any of that \$25 million had been distributed to private employers who have been tasked with retrofitting their equipment. Ms. Heroy-Regalski

responded that CARB also distributes \$140 million in incentive funding annually largely to private companies.

Henry Hogo, the Assistant Deputy Executive Officer of the Mobile Source Division for the South Coast Air Quality Management District (SCAQMD), stated that SCAQMD is well-versed in retrofit technologies. It has worked with retrofit manufacturers as well as with stakeholders to explore the various aspects of retrofit devices. He responded to Ms. Kustin's comment regarding emissions from off-road sources as opposed to on-road sources. SCAQMD just released an Air Quality Management Plan in which it demonstrated that the construction equipment category, including off-road equipment such as ground support equipment, has approximately the same emissions as on-road heavy-duty trucks. Thus, it is a very large category of emissions.

SCAQMD's concern always has been whether or not the retrofit technologies actually work. By state law, it receives funding to research and demonstrate technologies and bring them to commercial employers. SCAQMD has been looking at retrofit technologies. Two years ago, when SCAQMD realized that it needed to look at the off-road equipment retrofit technologies, it held a technology forum with the experts in these technologies and discussed the types of issues that may occur when these devices are verified by CARB. SCAQMD worked very hard with vendors to ensure that these devices work and work properly. The SCAQMD board requires that when regulations require some sort of technology, the technology works. SCAQMD has six fleet rules for on-road vehicles that have been in place since 2000-2001, which require on-road trucks to be replaced with alternative fuel vehicles. At that time, SCAQMD worked closely with the Division to understand alternative fuel safety. It also worked with CARB to establish the Showcase Program, which explores what type of retrofit devices can be verified by the state for use by off-road vehicles.

Currently, 30 devices are being tested on approximately 240 pieces of equipment, and SCAQMD has been working closely with construction institutes that have applied for funding in trying to understand the issues relative to retrofit devices, including obtaining information from operators regarding their experience with the use of these devices and their placement on the equipment. The reduction in visibility has been an issue since the beginning. Thus, SCAQMD believes that the Showcase Program can provide valuable information to the Board staff in the development of appropriate regulatory language necessary to address this safety issue. Mr. Hogo invited Board staff to come to SCAQMD and observe the devices in operation. He summarized by stating that SCAQMD would like to be part of the rulemaking process and work with the Board staff in crafting regulatory language.

Dr. Frisch asked whether the devices that are being tested comply with Cal-OSHA requirements as they presently exist and whether that compliance was evaluated before the devices were installed. Mr. Hogo responded that they are going through the specification of how the device will be fabricated, as that is one of the areas of concern.

Dr. Frisch explained that he was trying to get clarification on a comment made by Mr. Prescott. Dr. Frisch asked whether, to Mr. Hogo's knowledge, variance applications had been submitted for any of these devices. Mr. Hogo responded that there were CARB experimental variances in place, but to his knowledge no applications had been submitted to the Division or to the Board.

Dr. Frisch stated that the assertion has been made that there are devices presently operating that are in violation of Cal-OSHA standards, and he expressed interest in how SCAQMD's Showcase Program assures that the devices that are being installed as part of that experimental program are compliant with Cal-OSHA. He asked whether an evaluation as to whether these devices are compliant with Cal-OSHA regulations had been performed. Mr. Hogo responded that SCAQMD would ensure that such an evaluation is performed.

Dr. Frisch stated that he did not want to see experimental work or the development of permits that are sacrificing one form of safety for another. He stated that a situation is being created in which employees on the ground in an off-road environment with these large vehicles are being put at risk of being run over as a result of the operator not having adequate visibility, and that is a real problem. Mr. Hogo responded that the concern has been that different manufacturers have different designs, and in the testing process between SCAQMD and CARB, perhaps they should involve the Division and/or Board staff as well.

Dr. Frisch stated that his concern is that employers utilizing this equipment on SCAQMD's behalf in the test scenario are ultimately responsible to ensure that they have the necessary permits. Mr. Hogo responded that SCAQMD works closely with those employers to ensure that all current safety standards are met.

Dr. Frisch asked Mr. Hogo to submit to the Board an explanation of what process SCAQMD has in place to make certain that Cal-OSHA standards are not being inadvertently violated when these devices are being installed.

Gale Plummer is the Chief Operating Officer for Cleaire Advanced Emission Controls (Cleaire), which is a California-based manufacturer of Verified Diesel Emissions Control Systems (VDECS). Cleaire has been in the industry for approximately eight years and has approximately 5,000 devices employed.

Mr. Plummer stated that Cleaire agrees with the proposed change to Section 1590 regarding direction of the exhaust away from the operator. However, he stated that VDECS do not produce higher external temperatures than the exhaust system installed by the original equipment manufacturer (OEM). The OEM is held to a general manufacturing standard for guarding and protection of the muffler; when a Cleaire VDECS is installed, it is expected to keep the same safety factor in mind. He submitted engineering test reports that demonstrate that the skin temperature of Cleaire's devices, while in regeneration and in operation on the vehicle, and the skin temperature of an engine muffler are in the same general range. In fact, in many cases the Cleaire devices are lower in temperature.

In addition, Cleaire is concerned that a requirement for an individual assessment and written approval prior to installing a VDECS holds the VDECS manufacturer to a more stringent standard than the OEM. He stated that the reduction of visibility requirement proposed in the petition is too vague and subjective to be enforced, as VDECS are no more than 3 to 4 inches larger than the OEM exhaust system, and in many cases, the VDECS are installed in the same location as the OEM system. The question of structural integrity is the same. While a VDECS may weigh approximately 100 pounds, the OEM device may well weigh 30 to 50 pounds, depending on the machine, and the amount of mud carried on a wheel-loader, for example, far

exceeds the weight change for a Cleaire device for a large machine. On a smaller machine, it may make a difference in structural integrity. Further, from an economic standpoint, the expense of the VDECS approaches the value of the smaller machine, so it is more cost-efficient to purchase a newer machine that already meets the emissions standards.

Mr. Plummer stated that a requirement for prior written approval from the manufacturer is an unreasonable expectation, as such approval will not be forthcoming. Manufacturers will not be willing to take on the liability of approving the installation of VDECS; the decision would require the manufacturers to have a substantial engineering resource available to make that evaluation, and there simply is no reason for a manufacturer to perform such an evaluation. The process for a dealer just to put an attachment on the machine is very cumbersome and can take from six weeks to months for the OEM to approve the installation of an attachment. Additionally, prior written approval from the manufacturer is not required to install other after-market accessories, such as a cab enclosure, a bigger pre-cleaner, or a different air filtration system. Such installations are covered under the general guidelines of safety and visibility.

Mr. Plummer further stated that there are a number of industry and technology devices to overcome limited visibility, such as cameras, which are very common in wheel loaders that operate in certain applications, and additional mirrors. In normal operation of most machines, the operator does not turn around and look out the back window; the operator generally uses mirrors, cameras, and safe zones around the machines that are already regulated.

Mr. Plummer went on to state that the exhaust system alone is not the only thing that can impact the operator's visibility; the judgment issue of how that visibility is impacted is really the heart of the matter, and the skin temperatures of the VDECS are no different than the OEM muffler systems that are already installed. In reference to the accident statistics that were mentioned, while it is extremely unfortunate that 45 individuals lost their lives in the construction industry, there is nothing in the data presented to indicate that visibility was the root cause of those accidents, and it will take a very detailed examination of each incident to determine if operator visibility was the root cause, and if so, did it have anything to do with front or side visibility, rear visibility, or any of the areas that might have been impacted by the installation of the device.

Mr. Plummer concluded by stating that during tough economic times, there has been some talk about replacing the machines with newer, lower emission machines, and frankly, with the current economic crisis, it becomes even more difficult to purchase a new machine with a Tier 4 diesel engine, and retrofit is a viable path to extend the life of the older machines and keep many of the employers in business. Thus, rather than being the bane of the construction industry, it could actually be the salvation to be able to reap the economic value originally purchased in that machine by retrofitting and keeping it in compliance with CARB rules.

Camille Kustin with EDF stated that off-road equipment comprises approximately 20% of total toxic diesel particulate matter and 16% of total smog-forming nitrogen oxide, and the CARB rule as it currently exists would reduce toxic matter by 75% and nitrogen oxide by 22%.

When the CARB rule was being drafted, EDF was part of a larger coalition of environmental health, community, and environmental justice specialists and organizations that worked very hard to ensure that this regulation was crafted in a way to maximize the community and worker

health benefits while also ensuring that it was economically feasible for compliance. This rule is necessary for the state to meet its federal clean-air requirements under the Clean Air Act, and it will also improve the health of Californians, particularly in the San Joaquin valley and in the Southern California region. In addition, it will save millions of dollars in health care, loss of life, and loss of productivity costs.

Ms. Kustin expressed concern that, from EDF's perspective, it appears that the Board is considering opening the CARB rule to modification.

Mr. Jackson stated emphatically that the Board is not considering modification to any of the CARB rules. The Board is solely concerned with the occupational safety affects of some retrofits that might obstruct the operator's view.

Ms. Kustin stated that a letter detailing the concerns of the EDF, the Natural Resources Defense Council, and the Union of Concerned Scientists had been submitted to the Board. She then summarized those concerns, beginning with the statement that although the proposed decision indicated that all concerned stakeholders were included in discussions regarding the petition, neither EDF nor CARB were contacted.

Mr. Jackson stated that the people who have submitted written comments to the Board are interested parties, and they will be involved in any discussions that are held regarding the crafting of regulatory language. However, the stakeholders are employers regulated by Cal-OSHA who are tasked with protecting their employees, who are represented in this case by organized labor. The Board wants to ensure that there are not employees on the ground at risk of being run over because they cannot be seen.

Ms. Kustin responded that she understands that point, but to protect those workers, it has been discussed that a filter would not be installed. She further stated that, with regard to employee safety, diesel particulate matter is especially acute and those working in those vehicles are especially impacted by it. There have been numerous studies on the impact of diesel particulate matter, including causing cancer, impairing brain function, and creating asthma attacks and respiratory illnesses. The list of the health impacts of diesel particulate matter is extensive, and the filters are particularly important for the health of those employees and all Californians.

She stated that EDF does not want a trade-off between the consequences of limited visibility and respiratory health. EDF and CARB, along with other interested parties, are asking to be part of any discussion regarding regulatory language.

Dr. Frisch asked whether EDF is willing to sacrifice employees on the ground risking injury or even death in exchange for cleaner air. He stated that if one accepts the proposition that blocking the view of the operator puts an employee on the ground at risk of being run over, and if one accepts the proposition that it is necessary to block the view of the operator to some extent in order to install the filtering equipment, one accepts the trade-off between controlling air pollution and compromising direct employee safety. He asked how he, as a member of the Occupational Safety and Health Standards Board, should view that trade-off from EDF's point of view. Ms. Kustin responded that from her experience and what she has seen, and what some of

the retrofit manufacturers have indicated, it does not necessarily need to be a trade-off; the filters can be installed in such a way that will not obstruct the operator's vision.

Dr. Frisch stated that the language proposed in the petition attempts to address installing the equipment in such a way that the trade-off is not made. However, EDF is asking the Board to set aside that proposed language to some extent and has indicated that they do not want a regulation that is going to impinge on the ability to install the filtration devices. He stated that he has heard testimony this morning that would lead him to believe that visibility, while possibly considered, was not a defining decision in installing experimental devices on large equipment trucks. He stated that, while that statement may be untrue, that was his understanding of some of the testimony offered today; visibility was a secondary consideration.

He asked how the Board should view the trade-off, from EDF's point of view, if it comes to a point of a trade-off between people being burned or run over and reduction of air pollution through installation of a device that does block visibility. Ms. Kustin responded that there are ways to mitigate the lack of visibility through the use of mirrors, cameras, etc. In addition, the CARB regulation states that if there are possible safety concerns, there is an appeals process. Ms. Kustin stated that if it comes to a point where an employer is faced with this decision, then the stakeholders and the interested parties need to determine the best method of handling it. She stated that if it is left up to the vehicle manufacturer to determine whether an installation is safe, it presents a conflict of interest, as a vehicle manufacturer may not have the expertise to determine the safety of an installation.

Dr. Frisch asked what expertise EDF has in safety. Ms. Kustin stated that EDF's expertise is in protecting worker health. Dr. Frisch then stated that the drawback lies in EDF's lack of expertise in safety. He stated that the proposition being put forth by those opposed to the petition is whether an advisory committee should be formed or whether the Board should direct staff to go ahead with the development of a rulemaking package. He stated that it is not clear to him, from the people who have submitted written or oral comments, what additional information regarding safety is required to assist the Board in making that decision.

Mr. Jackson asked for Mr. Beales' assistance in making that determination. Mr. Beales stated that no one who had commented thus far, except possibly EDF, had requested the convening of an advisory committee, and the proposed decision merely directs staff to work with stakeholders and interested parties to develop a rulemaking proposal.

Ms. Kustin stated that EDF simply wants to be involved in any discussion of such a proposal.

Dr. Frisch stated that the struggle is not that the Board is ignoring the legitimate concerns raised by Ms. Kustin and others about the necessity of installing this equipment, but at the same time, it is incumbent upon everyone to remember that the Board's job is the safety of employees. The reduction of emissions and air pollution is important, but it is not the concern of the Board. Its focus is on the safety of the workers who are at risk of potential injury or death. He stated that he wants to be certain that the Board is not creating a situation that cannot be addressed by existing regulations of CARB, but at the same time, speaking from the experience of having been in the cabs of these heavy-duty trucks, the idea of having the operator's vision obstructed to the point that he is unable to see the people on the ground is frightening.

If there have been approximately 45 injuries, although data for the root cause of every incident may not be available, he does not think that CARB was thinking about this aspect of the regulation. He does not think it should have been because its focus is on other issues. CARB has built in a catch-all that states that if the installation violates an OSHA standard, an exemption is available. He stated that the Board is currently faced with whether the OSHA standard is adequate for visibility and for heat. He expressed his understanding of the requirement for prior written approval from a manufacturer, and that issue is one to be resolved by staff in the crafting of regulatory language. However, he cannot understand how EDF would object to the Board trying to protect the safety of the workers on the ground who risk potential injury or death. Ms. Kustin responded that she understands the safety concerns, and she expressed her concern that the petitioners, who were opposed to the CARB regulation throughout the process, are now working this angle as a way of getting around it.

Dr. Frisch expressed his willingness to set petitioners' opposition to the regulation aside because he understands their motivation. However, Ms. Kustin is perilously close to making an accusation that may not be fair. He stated that labor and management very rarely agree on anything, and for them to have done so with this petition indicates that the safety issue is of grave concern to both factions. He expressed difficulty accepting the idea that the petition was motivated by the desire to save money, based on the cooperation between the two groups to submit it to the Board. He stated that the motivation is to protect worker safety, and he expressed his opinion that the language proposed in the petition will not impinge on CARB's rule. Ms. Kustin responded that therein lies the value of working with Board staff and stakeholders in crafting language that can balance both worker safety and air pollution control.

Dr. Rasto Brezny is the Deputy Director for the Manufacturers of Emission Controls Association (MECA). He stated that MECA takes issue with the regulatory language proposed in the petition, particularly the requirement that vehicle manufacturers approve an installation. He also stated that several of the vehicle manufacturers have their own retrofit business, and therefore they have no interest in approving a competitor's retrofit installation. MECA considers safety a top priority when developing and installing emission control devices. He indicated that that area requires further definition from that proposed in the petition because an adequate level of visibility is very difficult to define. He stated as an example that an excavator has a different level of visibility than a skid-steer loader, and even between two manufacturers of the same type of equipment, there are different levels of visibility.

For example, New York City has adopted a regulation requiring that all construction equipment be equipped with the best available control technology, such as the filters under discussion, on all public construction projects. As part of that regulation, the city of New York has also incorporated clear guidelines and specific requirements for the devices. On the question of visibility, they have a professional safety engineer tasked with approving the installations, and prior to the installation, they place a box meeting the dimensions of the device on the vehicle and evaluate whether the device will represent a significant impairment to the visibility of the operator.

Dr. Brezny suggested that the Board direct staff to work with the petitioners, CARB, and other stakeholders and interested parties to work out the details to develop a rulemaking proposal that can be heard by the Board in the future.

Gordon Jenkins represents DCL International (DCL), which is a diesel particulate control device manufacturer. He stated that DCL is an engineering-based company, exploring every aspect of installing their devices on equipment. He stated that in some of their installations, the device fits inside the OEM muffler, so it has no effect on visibility. Other installations include muffler replacements. While some of their installations do present a visibility issue, DCL is testing that equipment to determine how severely visibility is limited by the device. He stated that many times, accommodations such as moving a mirror or installing additional mirrors, can be made. Filter size is dependent upon the horsepower of the machine; the less horsepower, the smaller the filter. DCL takes the time to engineer devices that present little or no visibility obstruction. He stated that DCL will not manufacturer anything that obstructs visibility, as that is a liability concern for them.

Dr. Frisch asked whether DCL had been required to take out an experimental variance with the Division for the equipment being tested for visibility obstruction. Mr. Jenkins responded that the device is presently operating, but he did not know whether it was operating under an experimental variance.

Dr. Frisch indicated interest in learning about the experience of the Division with the devices being tested by different manufacturers or organizations. Mr. Jenkins stated that he understands Dr. Frisch's concerns regarding the issue of visibility. He stated that he had attempted to provide the Board information on how DCL approaches the manufacture and installation of these devices, and he indicated that DCL wants to provide devices that are non-intrusive, do not obstruct visibility, and will actually clean the air.

Mr. Washington stated that it appears that DCL already has the capacity and the ability to build the filters to comply with the CARB rule, but he expressed concern regarding how to take care of the areas overseen by the Board, i.e., visibility and heat, when it comes to installation of these devices. He stated that the crux of the problem was that the air pollution half of the devices has been done, and the Board was now faced with the other half of that problem. Mr. Jenkins responded that to get a verification takes an enormous amount of time; each of the installations requires a vehicle onto which the VDECS can be placed and tested for 1,000 hours. They then must download the data, remove the filter, and send it to a lab for testing; when they receive verification from the lab that the device meets the requirements for that particular horsepower vehicle, they then can test the next size horsepower vehicle. DCL is currently very limited in horsepower scope; they have a device for 75 to 300 horsepower and only rubber-tired vehicles. They are, however, testing higher horsepower machines.

Beth White is a Pollution Specialist with CARB. She stated that CARB is very interested in working with the petitioners and Board staff, and have been since the beginning. She expressed her impression that the discussion today was not to revolve around specific installations, but given some of the previous comments, she would go into it a little bit to demonstrate that CARB thinks it is a really good idea to amend the Title 8 regulation mentioned in the petition.

CARB provided in their regulation that if a VDECS cannot be installed without violating the safety standards prescribed under Title 8 CCR by California Department of Industrial Relations, DOSH, or federal or state mine safety laws, the Executive Officer shall issue a determination that there is no highest level VDECS available, meaning that the vehicle is exempt from the regulation.

She expressed her opinion that there is no need for a trade-off between employee safety and air pollution control. She stated that worker safety could be protected while controlling diesel particulate matter. There are cases of safe installations, CARB knows that the diesel particulate filters work, and she is confident that stakeholders, Board staff, and interested parties can reach a consensus and develop regulatory language that is acceptable to all.

In addition to the regulations addressed by the petitioners, there are various other safety orders that can and possibly should be amended to include objective criteria for adequate visibility requirements and thermal hazard protection. She also stated that the CARB regulation is still in the "early credit" phase, which means that employers are not yet required to install these filters, but this is a time during which issues can be brought to light and addressed as quickly as possible.

Mr. Jackson asked whether CARB has a specific recommendation for language for the Board to consider. Ms. White responded that she was told that the Board would not want to get into that today, but she had opened the discussion because it appears that there is a need for such language.

Mr. Jackson stated that he had not heard from the Board members that there was a belief that there was a need for such language. CARB may believe that there is a need, but based on the questions posed by the Board today, because the Board is tasked, by statute, with paying attention to the safety of employees in the workplace, and the installation of some of these filtration devices may encroach on that safety and place employees in imminent danger, that is the first task that the Board is obligated to undertake. He further stated that there did not appear to be anything in the proposed petition decision to direct deliberate ignorance of CARB's regulations. Ms. White responded that the language of the safety standard, as suggested by the petitioners, is problematic; thus, she is in favor of modifying it.

Mr. Jackson stated that the language had not been suggested for adoption. If this petition decision were adopted, there would be notice, hearing, and a rulemaking record, and everyone who had concerns about it would have an opportunity to be heard about the language that was in a proposed regulation. This is not a proposed regulation. Ms. White responded that she understood that granting a petition does not mean granting the verbatim language. However, the proposed petition states that Board staff's suggestion is that they work with the petitioners, CARB, and other interested parties to craft appropriate regulatory language, and that it is an excellent idea. She stated that CARB had started that process already when they asked Division personnel to discuss which OSHA standards might be affected by the CARB regulation, how that should be addressed, and whether ANSI or ISO standards should be used as objective criteria.

Mr. Beales stated that Acting Chair Jackson had already noted that this is not a public hearing on a rulemaking proposal; however, Ms. White's comments are germane to the granting of the

petition because she has suggested that in addition to considering the language suggested by the petitioners, the Board staff also consider including references to objective consensus standards in developing the criteria which will be stated in the language that is ultimately proposed as part of a rulemaking. With that point made, the input relative to the petition has been provided.

Mr. Jackson stated that while he did not want to limit the remaining speakers' testimonies, he did want to emphasize that there was no need to repeat information already heard, nor was there any reason to read into the record any written comments submitted to the Board; all comments would be considered.

Charlie Cox represents Ironman, a diesel retrofit installer. He stated that the petition proposal to craft language to ensure worker safety is in everyone's best interest, and Ironman does not oppose that proposal. However, they would like to be part of the process of developing a rulemaking proposal. He further stated that there are a number of applications that Ironman has denied due to the fact that those applications obstructed operator visibility or posed other safety hazards. Ironman hired an engineer out of Detroit, who spent years working for a major automotive manufacturer designing automobiles and other equipment, for the purpose of ensuring that Ironman's installations are safe. That is the exception, rather than the rule. There are other companies that will install any application for the right price, regardless of safety considerations. The installations can be done safely and intelligently, and there does not need to be a trade-off. However, given the choice of running over somebody or emitting a few more pounds of particulate matter, he expressed his belief that all parties were on the same side.

Dr. Frisch asked Mr. Cox how Ironman considers Cal-OSHA regulations in the course of deciding whether they are going to accept an installation job or not. Mr. Cox responded frankly that they have not been able to discover how to get proper guidance for it, so they have been going through CARB. Thus, they are waiting for guidance, but for Ironman's own internal purposes, if it alters the operator's visibility, the installation has not been performed.

Acting Chair Jackson called a 10-minute recess at 11:42 a.m., and reconvened the meeting at 11:52 a.m. He reiterated that it was not necessary for witnesses to repeat testimony that is already in the record, and there was no need to read written comments into the record.

Bruce Wick is the Director of Safety for the California Professional Association of Specialty Contractors (CalPASC). He stated that one of the issues in question was that of chronic exposure and acute exposure. The safety of employees on the ground in the vicinity of mobile equipment weighing 150,000 pounds is at odds with the CARB regulation and needs to be resolved. The use of mirrors and cameras is not a solution when visibility is significantly obstructed. As for the question of manufacturer prior written approval, that language has been removed from other Cal-OSHA standards, and the intent is to state that if an installation can be done safely, prior approval is not necessary. He stated that employers have an incentive to get a double credit for early installation of filtration devices, and he asked the Board to adopt the proposed petition decision, begin to develop a rulemaking proposal, and include the oral and written comments received thus far in the public dialog.

Gary Rohman is a Vice President for ECCO Equipment Corporation (ECCO). In addition, he is the Associated General Contractors (AGC) representative on the Construction Industry Air

Quality Coalition (CIAQC) board. He stated that some of the photos provided in the Board packets were equipment owned by ECCO. In 2000, ECCO adopted a policy that they would control their emissions. As part of that policy, they took the emissions from Tier 0 (pre-1996) equipment from 97% to 21%, and they spent \$67 million achieving that goal. Tier 0 equipment will not be eligible for sale or purchase in the state of California as of March 2009, and Tier 1 equipment will not be eligible for sale or purchase effective March 2010. The effort ECCO made to achieve the lower emissions was wasted money because they do not receive any credit for that.

Thus, ECCO has performed a lot of work in making their fleet compliant with CARB regulations. They repowered 31 pieces of equipment, and of those, particulate filters were installed that were not only verified but mandated by CARB through the Carl Moyer program. Once they were installed, ECCO had visibility problems, and they contacted CARB to ask them to examine the equipment. CARB examined the equipment, but neither it nor the Air District would render a decision as to whether the equipment was safe or unsafe. CARB's response was that if the filters were mandated, they were to be used, so ECCO used them. A customer called ECCO to complain about the safety of the machine and ask that it be removed immediately from the jobsite. After that complaint, ECCO took every machine with that type of filter out of service, and on June 11, Mr. Rohman sent a letter to CARB's Executive Officer requesting the waiver through the process provided in the regulation. ECCO has yet to receive a response to that request.

Mr. Rohman then showed photographs of the operator's view on various machines with and without the filters. In each photo was a person standing on the ground approximately 40 feet behind the machine. In the photos of the equipment with the filters, the person standing behind the machine was almost completely obscured. Mr. Rohman stated that he has done everything in his power to try to promote the CARB rule, including assembling 17 workshops advising the industry that this requirement was coming, and once it was adopted, he gave four additional workshops detailing how to comply with the rule. Thus, he was offended by the accusation that ECCO was attempting to undermine the off-road rule. He stated that the petition is not about undermining the off-road rule, but about protecting worker safety. He concluded by asking the Board to adopt the proposed petition decision in order to facilitate the development of a rulemaking proposal to address the issue.

Mr. Jackson asked whether Mr. Rohman had been able to get any feedback from the Division about safety and the installation of these filtration devices. Mr. Rohman responded that he had not received any feedback until he asked OSHA to participate in a meeting with CARB in August. He stated that CARB had verified and mandated the equipment, and as far as he was concerned, that was all he needed. He knows now, however, that he was wrong, but there is a learning process that goes along with the CARB rule. He further stated that there currently is a huge problem in that there are many machines with the filtration devices on them working today.

He stated that there are some installations that are done right, and manufacturers and installers have testified about that today. However, the obstruction of visibility demonstrated in his photos is clearly wrong.

Mr. Jackson referred Mr. Rohman to a letter addressed to him from Larry McCune of the Division and asked whether Mr. McCune had offered an opinion about whether or not the installations were in compliance with Cal-OSHA. Mr. Rohman responded that Mr. McCune had indicated that the installations were unsafe. Mr. McCune and other Division staff came to ECCO's yard in response to a phone request from Mr. Rohman when ECCO received the customer complaint. After examining the installation, one of the Division staff stated that if he were an enforcement person, he would have to cite ECCO for violation of a safety order. Thus, the equipment has remained parked. Filters have been removed from some of the machines in order to get them back out in the field. He mentioned that these devices are very expensive; in fact, the two that were removed cost \$56,000. Thus, ECCO has close to \$500,000 worth of retrofit equipment sitting unused because it is not safe. He did not specify whether each removed device had cost \$56,000 or whether that was the cost of both filters combined.

Mr. McCune stated that the Division has been working with CARB and attending some of the meetings to discuss the retrofit issues. Some of the installations are done without impacting safety, while others have a severe safety impact, as indicated in the photos that have been displayed. Regarding off-road heavy equipment and mining and tunneling equipment, visibility is precious, and what little clear visibility is available cannot be compromised.

When there is equipment in which the operator must look behind him and that visibility is completely obscured, there are other safety orders that come into play such as back-up alarms, signal persons, and other devices that can be used to warn people on the ground that the equipment is backing. However, judging by the accident studies Mr. McCune has performed, there were many accidents and fatalities in which the equipment involved had operating back-up alarms and compliant systems. Thus, the operator's visibility is very important, and the Cal-OSHA regulations allow vehicles with obstructed rear visibility to use back-up alarms, cameras, or other devices, but they are not as effective as being able to see from the vehicle itself. Mirrors and other devices are fine, but they do not work well with this type of heavy equipment. Cameras get covered with dirt after a few minutes' operation, and back-up alarms are not always heard by people on the ground, and it adds to the hazard of operating the equipment.

His recommendation, therefore, is that the petition be approved, and if there are necessary changes to the regulatory language, Board staff or the regulated public could make those suggestions during the process of developing a rulemaking proposal or during the public hearing process. It is a severe enough hazard that the safety issues need to be addressed.

Elizabeth Treanor is the Director of the Phylmar Regulatory Roundtable. She stated that she had not intended to speak on this issue, but it has become apparent that the individual missions of CARB and OSHSB appear to be in conflict. CARB has adopted a regulation to protect employee health that poses a serious threat to worker safety. Thus, she recommended that the Board move forward with the petition and the subsequent rulemaking proposal to explore all of the issues in depth and come out with a solution that most adequately assures, to the extent feasible, that no employees suffer permanent health impairment. Ms. Treanor was the final commenter on Petition File No. 507.

Jogen Bhalla of AMOT, the author of Petition File No. 505, thanked both the Board staff and Division staff for their excellent analyses of the safety issue addressed in his petition, and

recommended that the Board adopt the proposed petition decision to expand the current safety standard to include the high risk of diesel removal as well as vehicle diesel engines in refineries.

Since filing his petition in July, AMOT has discovered and reported more accidents involving diesel engines that have resulted in deaths and injuries. He stated that he had submitted a letter from the United Steel Workers (USW) indicating USW's support of AMOT's petition.

He stated that he had spent the last two days in Bakersfield, where people are using phone books, binder jackets, or 2"x4" plywood to prevent flammable gas or vapor from entering the air intake. AMOT believes that these stop-gap measures represent a significant risk.

Dr. Frisch referred to the "Simplified Diesel Engine Risk Assessment" table included in the Board packets, and he asked whether Mr. Bhalla was proposing to include in the standard vehicles that are not within the plant boundary but within 75 feet of a refinery, chemical, or petrochemical plant. He cited as an example a refinery in which the main road in the neighborhood ran through the middle of the refinery. Mr. Bhalla responded that AMOT had based the 75-foot standard on Canadian regulations, which specify a distance of 23 meters. AMOT had discussed this petition with Canadian authorities, and the Canadian standard even applies to people mowing the lawn outside the refinery. Mr. Bhalla stated that a similar California standard would be ideal but not absolutely necessary. AMOT's primary concern is the diesel engines operating in the hazardous environment.

Dr. Frisch asked whether the devices recommended in the petition were currently in common use. Mr. Bhalla responded affirmatively, and added that engine manufacturers such as CAT, Cummins, and Toyota Diesel are all working with AMOT to integrate the design as part of their engines.

C. ADJOURNMENT

Acting Chair Jackson adjourned the meeting at 12:14 p.m.

II. **PUBLIC HEARING**

A. PUBLIC HEARING ITEM

Acting Chair Jackson called the Public Hearing of the Board to order at 12:25 p.m., November 20, 2008, in the Second Floor Council Chambers of the Glendale City Hall, 613 E. Broadway, Glendale, California.

Acting Chair Jackson opened the Public Hearing and introduced the first item noticed for public hearing.

1. TITLE 8: **GENERAL INDUSTRY SAFETY ORDERS**
Division 1, Chapter 4, Subchapter 7, Article 98
Section 4994
**Crane Hoisting—Use of Outriggers, Stabilizers, and Other
Supports**

Mr. Manieri summarized the history and purpose of the proposal and indicated that the package is now ready for public comment and the Board's consideration.

There was no public comment on this proposal.

B. ADJOURNMENT

Acting Chair Jackson adjourned the Public Hearing at 12:19 p.m.

III. BUSINESS MEETING

Acting Chair Jackson called the Business Meeting of the Board to order at 12:19 p.m., November 20, 2008, in the Second Floor Council Chambers of the Glendale City Hall, 613 E. Broadway, Glendale, California.

A. PROPOSED PETITION DECISIONS FOR ADOPTION

1. Jogen Bhalla, Vice President
AMOT
(Petition File No. 505)

The Petitioner requests the Board to amend Title 8, Petroleum Safety Orders--Refining, Section 6874, by expanding the current regulation to address safety devices and safeguards to prevent fire and explosion for stationary, mobile, and vehicular diesel engines operating in or around refineries.

Ms. Hart summarized the history and purpose of the petition and indicated that the proposed decision was ready for the Board's adoption.

MOTION

A motion was made by Mr. Kastorff and seconded by Mr. Washington that the Board adopt the proposed petition decision.

A roll call was taken, and all members present voted "aye." The motion passed.

2. Bo Bradley, Director of Safety, Health, and Regulatory Services
Associated General Contractors of California
Guy Prescott, Director of Safety
Operating Engineers Local 3

(Petition File No. 507)

The Petitioner requests the Board to amend Title 8, Construction Safety Orders, Sections 1590(d), 1591(b), and 1597, regarding exhaust and modifications of equipment.

Ms. Hart summarized the history and purpose of the petition and indicated that the proposed decision was ready for the Board's adoption.

MOTION

A motion was made by Dr. Frisch and seconded by Mr. Washington that the Board adopt the proposed petition decision.

Dr. Frisch emphasized that staff keep in mind the mission of the Standards Board and not allow themselves to become distracted by other issues. This is a complicated question in that it concerns air quality standards that are not the purview of the Cal-OSHA Standards Board, and he wants to make absolutely certain that staff consider the question from the occupational safety perspective in crafting a rulemaking proposal in order to prevent getting "wrapped around the axle."

A roll call was taken, and all members present voted "aye." The motion passed.

B. PROPOSED VARIANCE DECISIONS FOR ADOPTION

Mr. Beales stated that of the six proposed variance decisions on the consent calendar, two of them indicated "Grant or Deny." It was proposed that the Board grant those two variances. Thus, Mr. Beales requested that the consent calendar be revised accordingly and that the Board adopt the variance decisions as proposed on the revised consent calendar.

MOTION

A motion was made by Dr. Frisch and seconded by Mr. Washington to adopt the consent calendar as modified.

Dr. Frisch stated that, based on his reading of the variance relating to Thyssen-Krupp ISIS I elevators, there appears to be some doubt as to whether the 2009 deadline for replacing the Aramid ropes is going to be met, and some flexibility had been built into the plan to allow for extension into 2010 if necessary. He asked whether that flexibility was included for any particular reason or whether it was more likely than not that the rope replacement deadline would be extended to 2010. Mr. Beales responded although he was unable to give an informed answer to the question, there is a good chance that that deadline might well be extended to 2010. He further stated that if the deadline were extended to 2010, it would be extended only with the consent of the Division as set out in the condition. He noted that the two-stage deadline arrangement mirrors a similar condition in the ISIS II decisions previously adopted. In this particular case, the process has actually begun, although not yet in California; it was to

start the retrofits in California soon, if they had not already. The plan was to retrofit the ISIS II's before the ISIS I's.

Dr. Frisch asked Mr. Beales to clarify whether the Board had heard one ISIS II variance application to date, and the one under discussion would be the first ISIS I. Mr. Beales responded affirmatively.

Dr. Frisch asked how many more ISIS elevator variance applications were being processed. Mr. Beales responded that there would be 17 ISIS II's to be heard on December 9, 2008, and a number of ISIS I's that would be heard in the future but were not yet ready for hearing.

Dr. Frisch asked whether Mr. Beales was aware of how many ISIS elevators currently were installed under experimental variances in California. Mr. Beales responded that he was aware, but he did not have the numbers readily available. He did state that they were all operating under experimental variances.

Dan Leacox of Greenberg Traurig indicated that there approximately 70 elevators covered by approximately 40 variances.

A roll call was taken, and all members present voted "aye." The motion passed.

C. OTHER

1. Legislative Update

Mr. Beales stated that there was nothing to add to the written update included in the Board packets.

2. Executive Officer's Report

Ms. Hart summarized the Calendar of Activities included in the Board packets. She also indicated that the 2009 Meeting schedule was included in the Board packets and that all dates and locations have been confirmed.

Ms. Hart stated that both the student assistant, Fu Yiu, and the retired annuitant, Richard Parenti, are back at work after being laid off in accordance with the Governor's Executive Order in September. In addition, the recruitment period for the vacant Associate Safety Engineer position had concluded on Friday, November 14, 2008, and interviews would be conducted in December. She indicated that currently there is a good candidate pool, and the Department of Industrial Relations continues to conduct open testing for the position.

Dr. Frisch asked how many PELs had been received from the Division to date. Ms. Hart responded that currently there is a PEL package under internal review. That package was not a result of the HEAC, and it is nearing completion.

Dr. Frisch then congratulated Mr. Manieri on his 100th Standards Board meeting.

4. Future Agenda Items

D. ADJOURNMENT

Acting Chair Jackson adjourned the Business Meeting at 12:36 p.m.